

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 13783US02)

In the Application of:

Uri Elzur et al.

Electronically Filed on February 9, 2010

Serial No.: 10/652,330

Filed: August 29, 2003

For: SYSTEM AND METHOD FOR
NETWORK INTERFACING

Examiner: Hoang, Hieu T.

Group Art Unit: 2452

Confirmation No.: 1614

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicant requests review of the final rejection in the above-identified application, stated in the Final Office Action mailed on October 6, 2009 (Final Office Action) with a period of reply through February 8, 2010, pursuant to a petition for one-month extension. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is being requested for the reasons stated on the attached sheets.

REMARKS / ARGUMENTS

Claims 18-21, 25 and 33-41 are pending in the instant application. Claims 3 and 22-24 have been previously cancelled, and claims 1-2, 4-17, 26-32 and 42-49 are withdrawn due to allegedly being directed to a non-elected invention. Claims 18, 20, 22-29, 31, 32 and 36-41 are rejected under 35 USC 103(a) as unpatentable by USPP 2001/0037406 ("Philbrick"), in view of USPP 2002/0059451 ("Haviv"). Claims 33-35, 30 are rejected under 35 USC 103(a) as being unpatentable over Philbrick in view of Microsoft Winsock Direct and Protocol Offload on SANs, 03/03/2001 ("Microsoft"). The

Applicant respectfully traverses these rejections at least based on the following remarks.

I. Examiner's Response to Arguments in the Final Office Action

The Applicant maintains that the combination of Philbrick and Haviv does not disclose or suggest "a **single** Ethernet connector for handling a plurality of different types of network traffic transported via a single fabric, wherein the **single** Ethernet connector is coupled to the single integrated convergent network controller chip ...," as recited in Applicant's claim 18.

The Applicant in the 7/23/09 response (see pages 14-15) argued that Philbrick (see Philbrick's Fig. 6 and at ¶0106) discloses that the INIC 400 is connected to four network lines via the MAC 424 to **four corresponding network connectors**. The Examiner (see Final Office Action in page 2) argued that Applicant's claim does not exclude using more than one Ethernet connector. The Applicant disagrees, since Applicant's claim 18 clearly recites using only a "**single** Ethernet connector for handling a plurality of different types of network traffic transported via a single fabric".

In addition, the Examiner (see Final Office Action in page 2) also relied for support on Philbrick's Fig. 14 and argued that there is no need for Philbrick to have four connectors to function, that Philbrick discloses at least two different traffics (e.g., iSCSI and TCP/NetBios/SMB) over a same fabric. By assuming the Examiner's rationale in his above argument, Philbrick's Fig. 14 should at least disclose that the client (server) 602 is connected to the host server 600 with the NAS storage unit 642 and SAN storage unit 640 **via the same network line 644 (i.e., via the same Ethernet connector)**. However, contrary to the Examiner's allegation, Philbrick's Fig. 14 clearly discloses using separate network lines 604 and 644 (i.e., separate Ethernet connectors) to communicate with the client (server) 602 and the NAS storage unit 642 and SAN storage unit 640, respectively. In this regard, the Examiner's allegation that "there is no need for Philbrick to have four (i.e., more than a single) connectors to function..." is unsupported by the reference. Therefore, the Applicant maintains that Philbrick does not disclose or suggest "a **single** Ethernet connector for handling a plurality of different types of network traffic transported via a single fabric, wherein the **single** Ethernet connector is coupled to the single integrated convergent network controller chip ...," as recited in Applicant's claim 18.

The Examiner (see Final Office Action in page 3) disagreed with Applicant's argument that Philbrick's iSCSI traffic is of a single protocol, and, therefore, is a single traffic type. The Examiner seemed to have misunderstood Applicant's arguments. The Applicant (see 7/23/09 response in pages 16-17) argued that Satran discloses that the **SCSI** (not **iSCSI**) protocol and commands by themselves cannot be transported across the TCP/IP network infrastructure. In this regard, Satran discloses a new protocol

standard, namely the **iSCSI** protocol, with its own commands and numbering scheme for the iSCSI PDUs to be transported over the TCP/IP network infrastructure. Therefore, contrary to the Examiner's allegation, the iSCSI protocol by itself, is a unique protocol type (i.e., a single protocol of a single traffic type), and is not considered as two separate protocol types (i.e., separate SCSI and TCP network traffics). Accordingly, Philbrick's INIC handles the iSCSI traffic as a **single traffic type**, not two traffic types.

The Examiner (see Final Office Action in pages 3-4) argued that Philbrick's Fig. 14 and ¶¶0084-0085 disclose that the INIC 622 (the alleged "single integrated convergent network controller chip") handles at least two traffics over a same fabric (i.e., network line 644), namely the iSCSI SAN traffic and TCP/NetBios/SMB NAS traffic. The Applicant points out that even though Philbrick discloses that the same network line 644 (the alleged "single fabric") is connected to both the SAN storage unit 640 and the NAS storage unit 642, Philbrick however, discloses that only one storage unit is accessed at a time, not concurrently. In other words, there is still only one type of traffic, either the iSCSI SAN traffic **or** the TCP/NetBios/SMB NAS traffic, but not both are handled by the network line 644 (the alleged "single fabric"). The Examiner is referred to the following citation of Philbrick:

"A storage fast-path is provided by the INIC 622, under control of the server, for **data transferred between network storage units 640 or 642** and client 602 that does not cross the I/O bus. Data is communicated between INIC 622 and network storage unit 640 in accordance with a block format, such as SCSI/TCP or iSCSI, whereas data is communicated between INIC 622 and NAS storage unit 642 in accordance with a file format, such as TCP/NetBios/SMB. For either storage fast-path **the INIC 622 may hold another CCB defining a connection with storage unit 640 or 642.**"

See Philbrick at ¶0085 (emphasis added). The above citation of Philbrick clearly discloses that either the iSCSI data **or** the TCP/NetBios/SMB data is transferred to the INIC 622. In this regard, the network line 644 (the alleged "single fabric") still handles one type of traffic at a time, **but not concurrently**. Furthermore, the Examiner alleges that Philbrick (see Fig. 15 and ¶¶0093, 0097, 0099) discloses other traffics, such as the fast path audio and video traffics, as well as real time voice/video and NAS RTP/RTCP, SIP and MGCP that are communicated to the client server 602 via a single fabric. The Applicant points out that the listed traffics are communicated to the client server 602 **via an I/O bus 675**, which is neither handled by an Ethernet connector nor the INIC 606 of the client server 602. In this regard, the traffic via the I/O bus 675 does not read on the limitations of Applicant's claim 18.

The Examiner (see Final Office Action in page 4) argued that Philbrick's Fig. 14 and ¶0085 disclose that the INIC 622 concurrently processing three different types of network traffics. More specifically, the Examiner alleges that the INIC 622 holds three CCBs (i.e., client CCB, SAN CCB and NAS CCB) concurrently for distinguishing three different types of network traffic (i.e., TCP, iSCSI and SMB), therefore allegedly supporting a chip that concurrently processes a plurality of traffic types. The Examiner

is referred to Applicant's above argument that Philbrick's Fig. 14 and ¶0085 disclose that the INIC 622 controls data transfer between SAN network storage unit 640 or the NAS storage unit 642. In this regard, the SAN CCB and the NAS CCB are not concurrently handled by the INIC 622, as alleged by the Examiner. Also, the Applicant points out that Philbrick's client CCB is handled on a separate network line (not in the same alleged "single fabric") and using a separate connector. In this regard, the Applicant maintains that Philbrick's INIC 622 does not process all three CCBs (i.e., client CCB, SAN CCB and NAS CCB) concurrently (in a single fabric and using a single Ethernet connector).

Based on the foregoing rationale, the Applicant maintains that Philbrick does not disclose or suggest "the single integrated convergent network controller chip is operable to **concurrently process** the plurality of different types of network traffic (via the single fabric and a single Ethernet connector) **for the plurality of servers**," as recited in Applicant's claim 18. Even though Haviv discloses an interconnected fabric (the alleged "single fabric"), Haviv still does not overcome Philbrick's above deficiencies. In this regard, Applicant's claim 18 is submitted to be allowable.

The Applicant maintains the arguments of the 7/23/09 response to Office Action, and reserves the right to argue additional reasons to support the allowability of claims 18-21, 25 and 33-41 should such a need arise.

CONCLUSION

Based on at least the foregoing, the Applicant believes that all claims 18-21, 25 and 33-41 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

Date: February 9, 2010

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